Transmission Agency of Northern California (TANC)

Comments to the Renewable Energy Transmission Initiative (RETI)

Stakeholder Steering Committee (SSC) Regarding the Draft *Phase 2A* Report

INTRODUCTION

The Transmission Agency of Northern California (TANC) welcomes the opportunity to offer comments to the RETI Stakeholder Steering Committee regarding its draft *Phase 2A Report*. TANC has been successful at collaborative transmission development. Established in 1984 as a Joint Powers Authority (JPA), TANC was formed by its members to develop, build, and maintain transmission for the benefit of its members. TANC currently owns approximately 87 percent of the California-Oregon Transmission Project (COTP), a 339 mile 500-kV transmission line and associated facilities between southern Oregon and Tracy, California. TANC also has transmission rights contracted from the Pacific Gas and Electric Company (PG&E). The Agency is a member of WestConnect, wesTTrans, and the Western Electricity Coordinating Council, and is registered at the North American Electric Reliability Corporation as a Transmission Owner, Transmission Planner, and a Transmission Service Provider.

Additionally, TANC, along with the Western Area Power Administration (Western), is currently engaged in development activities for the TANC Transmission Project (TTP). The TTP, which is in the Scoping phase of its requisite environmental review process, entails the development of 600 miles of new high voltage transmission lines in northern California that will increase system reliability in northern California, and will provide access to renewable resource areas in northeastern California, one of the Competitive Renewable Energy Zones (CREZs) identified by this RETI process, as well as northwestern and central Nevada. Should the TANC participating Members decide to proceed with the project after the environmental reviews are complete, the project could be on-line as early as 2014.

Given the 33% Renewable Portfolio Standard (RPS), initiated by the Governor's Executive Order for all Load Serving Entities (LSEs) within the state, improved and expanded transmission facilities are badly needed to access the potential renewable energy in remote areas of the Western United States. A recent California Public Utilities Commission Report, *33% Renewable Portfolio Standard Implementation Analysis Preliminary Results*[1], highlights the urgency for timely high voltage transmission development to known renewable energy zones by indicating that under the best circumstances seven new transmission lines will be needed at a cost of $12 billion to reach a goal of 33 percent renewable energy usage, and even then the goal will not be reached until 2021. The report highlights the fact that citing and building transmission is a very lengthy process, usually around 7-10 years. However, this report only

[1] *33% Renewables Portfolio Standard Implementation Analysis Preliminary Results,* California Public Utilities Commission, p.4 "Key Findings and Timeline Analysis."

documents the need for new transmission to access renewable energy; transmission will also be needed for reliability, congestion management, and simply to meet the growing energy needs of Californians. This is why TANC has been investigating the development of its TANC Transmission Project for the last 5 years, to meet the varied reliability and energy needs of its Members.

GENERAL COMMENTS

TANC appreciates the efforts of RETI in trying to bring parties together to try and facilitate transmission and renewable generation development. Unfortunately, good intentions do not necessarily produce good results. The RETI Phase 2A report is flawed in both its scope and its methodology. The report states (p. 1-2) "One of the primary functions of this report is to provide a recommendation as to which potential transmission projects should be considered priorities for future study…". However, the RETI Phase 2A process was far more informed by transmission developers and their associated projects than the other way around. At best, the RETI Phase 2A conceptual transmission plan provides an extremely high-level statewide comparison of transmission projects that fails to incorporate the reality that individual Publicly Owned Utilities (POUs) and Investor-Owned Utilities (IOUs) are ultimately responsible to their ratepayers and must investigate the transmission options that best meet their needs, and that those needs extend well beyond solely the need to access renewable energy. That is why most of these proposed projects are already well in advance of this initiative in their investigations of costs, reliability, renewable energy access, and environmental review.

TANC does agree in principle with the recommendations made in Section 3.10. Specifically, TANC agrees that joint IOU-POU and other partnerships to limit costs and redundant facilities are highly desirable and TANC has pursued these opportunities whenever available, so long as they continue to satisfy the needs of its members. TANC, as mentioned, is itself a JPA made up of several public entities for the sole purpose of jointly developing transmission. While TANC agrees in principle with the concept of reducing rate pancaking, ratemaking issues are outside of the scope of the RETI purview; moreover, it is not clear how rate pancaking has any bearing on the development of transmission.

Given the purpose of RETI, ***to help facilitate the development of transmission***, the report is too narrowly focusing on "ranking" specific lines, with optimistic timelines, and is lacking any recommendations or even discussion on potential policy and process improvements that could help reduce the red tape and time needed to develop, site, and build facilities. Although trying to get consensus from various interested parties up front is admirable, the report will do nothing to hasten transmission and renewable development. In fact, the report may interfere with the usual processes and slow down development, as it generates more questions related to those projects that either are not in the report, or that appear unfavorably within the report.

The report does mention in passing its limitations. However, a presentation made at the 3 public meetings in mid-June laid out the many caveats and the many other processes

necessary to get a transmission project built in a much more transparent manner. Getting transmission built is data, time, and process intensive with many potential roadblocks and deal breakers along the way. Conditions change, new information is gained, and priorities are altered over time. This would seem to make it imprudent to try and pass too much judgment on any particular project or segment. The electrical and land use processes in place, while time consuming, do serve the purpose of fully vetting a line for all of its potential benefits and costs. Individual IOUs and POUs can make determinations based on their long-term planning processes aimed at serving their customers.

Apart from these broad comments, TANC also makes these specific comments:

SPECIFIC COMMENTS

Specific Recommendations

1. A listing of what RETI does and does not accomplish, similar to that presented by Billie Blanchard of the CPUC at various public meetings, should be presented within the report as an independent item, and included in the Executive Summary.
2. RETI should remove any recommendations related to ratemaking, as these are not within the purview of the RETI process, and have nothing to do with transmission development.
3. RETI should consider its work effectively done after completion of this Phase 2 Report, and should work with and help enable the newly formed California Joint Transmission Planning Group (CJTPG) to use the information in planning California's transmission.
4. RETI must elaborate on the analysis and the specific criteria used for the sudden and undiscussed removal of 2,400 MW of solar potential in the Lassen CREZs.
5. RETI should explain that it has not given consideration to the resource mix resulting from development of solely the southern CREZ, and has not determined whether there is an over-reliance on any one technology.
6. RETI should further elaborate on the criteria which must be met for lines to be considered as Foundation, Delivery, and Collector lines respectively; and should specifically explain the criteria applied such that the OLIND_DILL_1segment is **not** considered a Foundation line.
7. RETI should, at this point, be satisfied with having identified the CREZs, and an excess of potential transmission opportunities for the IOUs and the POUs to develop.
8. Given the uncertainty of the analysis, the static nature of the analysis, and the limited nature of the analysis, as highlighted frequently within the report, TANC recommends that no further prioritization of the identified transmission take place.
9. Without appropriate variance analysis, TANC feels that the graphical representation of the data represents a level of accuracy greater than the process has delivered. TANC recommends the removal of all graphical representation of scores.

10. ZETA1_RAVD_1 and ZETA1_RAVD_2 should be removed from *Appendix D: Transmission Line Segment Analysis*, as RETI themselves have designated these segments as a trunklines and are not subject to RETI review.
11. RETI should explain in much greater detail the extent of its environmental review definitions of exactly what was reviewed, whether any mitigation was considered, and exactly what the applied criteria are.
12. RETI should explain that it has **not** looked at collective or cumulative environmental or system impacts that might result from its over-reliance on the southern CREZs.

OTHER COMMENTS

Process

What is unusual in our estimation is that the assumptions and grading processes for the segments and projects were undergoing major revisions at the same time assessments were being made. It was as if the process was being "made up on the fly." Ideally, the assumptions and methodology that would be implemented should have been developed and open for public comment prior to attaching any sort of analytical assessment to the projects. Many of the formulations and analysis at use here are entirely novel, in that it has not really been attempted before. This is a difficult task, admittedly, but since it is fundamental to the report, it seems that a value-free look at the proposed analytics initially would have been preferred.

TANC understands that RETI believed it was under considerable time constraints given the Governor's Executive Order, S-14-08. However, the Order was issued in November of 2008, giving plenty of time for development of assessment tools. TANC believes that RETI could have developed its criteria methodology concurrently as it identified its CREZs in Phase 1. Unfortunately, much of this process waited until early 2009 and was being constantly refined and changed. Undoubtedly, RETI will receive many comments regarding the methodology shortfalls — comments it could have used much earlier in the process. While the RETI process is open for all to participate, it has not really provided, up until this point, a true forum for discussion of these issues.

Line Segment Groupings

The identification of Foundation, Delivery, and Collector lines is useful. However, much more analysis and rational criteria application are required before it is clear as to why a segment finds itself in one group and not another. Specifically, TANC wonders why the line segment OLIND_DILL_1 which connects the Olinda substation to a substation in Sacramento County, and which would presumably be able to transfer renewable energy from the various CREZs in Southern California to load centers north of Sacramento, is called a Collector line.

CREZ Changes

CREZ refinement is entirely warranted and TANC commends RETI on its work in Phase 2A on this front. Unknown and new issues are constantly changing the renewable energy landscape, which just further highlights the transient nature of much of RETIs work. The potential new Mojave Desert National Monument is an excellent example of some new information that could have potentially great impacts on where to build new generation and therefore new transmission. Although discussed in the report, nothing was done about this.

Similarly, TANC is concerned about the removal of 2,400 MW of potential solar energy in the Lassen area because that amount of "Solar potential (is) considered unrealistic and has been dropped from the CREZ." Much greater elaboration on this point as to how and why this conclusion was arrived at, and whether any similar screens were applied throughout other CREZs is required. Moreover, it is left unstated as to whom the 2,400 MW of solar potential was considered unrealistic.

Additionally, TANC takes issue with the RETI Report's failure to recognize out-of-state resources. The RETI report in Phase 1B identified considerable out-of-state CREZs, yet in Phase 2A these resources, citing the need for "well-enough" documented cost competitive resources are not included.

Shift Factors and Energy Access Scores

RETI introduces the concept of the Shift Factor in its analysis as a way to determine how much energy from CREZs is actually delivered on various line segments. The shift factors are predominate in the entire analysis, being an input into each and every one of the energy delivery scoring formulas. Therefore, the correlation between the energy rankings and the shift factors are not surprising.

It appears that too much importance is placed on the shift factors, when it is ***a methodology that has not been used before***, it is based upon various assumptions about CREZs and transmission, and it does not represent in any way how power would actually flow if certain transmission segments were actually built out. It represents another level of abstraction that obscures the analytics in the RETI report versus the realities of the transmission system. Additionally, the absence of out-of-state resources serves to skew the results even more.

Environmental Analysis

RETI's attempts at a comparative environmental analysis fall short in many regards. The scores presented are essentially meaningless in terms of their absolute values. A score of 60 versus a score of 600 has no meaning except in a relative sense; one is more environmentally preferred by RETIs standards than the other. ***However, it is not in any sense 10 times better.***

Presenting the environmental scores on a scale graph, such as presented in the report, ***presents the information in a misleading way.*** One must also keep in mind that this environmental analysis is based on a series of assumptions, and as you get further away from what is known to what is forecast or assumed, the less reliable the final conclusion becomes.

Moreover, TANC is not clear as to whether the environmental review is for a specific routing as shown in the RETI maps, or if it represents a general routing. In either case, there is no consideration of the fact that planning a new line requires extensive routing adjustments and mitigation as required by law, and to help minimize environmental and community impacts.

Several of the environmental criteria are not well-defined, such as 'Identified Cultural Resources' and 'Visual Impacts'. Two segments – LIVR_DELT_1 and ZETA1_RDMT_1 – have 'Possible social and EJ issues'. It is not clear what these social issues may be, and EJ is not defined. Any such a deterministic conclusion, no matter what the abbreviations were to mean, would require analysis **far** beyond that reported herein. In any event, as these are the only two segments with this footnote, TANC recommends its removal.

TANC also requests that the line segments ZETA1_RAVD_1 and ZETA1_RAVD_2 be removed from *Appendix D: Transmission Line Segment Analysis* as RETI themselves have designated this segment as a trunkline and not subject to their review.

Missing Items

The report provides no global context for its proposals. While each line is individually evaluated, there is no marginal analysis. The net effect appears to be an extremely high concentration of transmission and renewable energy development in Southern California, primarily in the desert. While each line may be considered beneficial, the impact of adding numerous lines and developing thousands of megawatts in total is not examined.

Additionally, there is no mention of the actual resource mix that would be the result of such a transmission plan. The plan assumes much of the renewable development will come from solar resources. Solar resources have quite a large footprint and the cumulative effect of such a buildout has not been examined. There seems to be no indication that RETI ever considered the resource mix at all.

The report also does not give appropriate consideration to regional equity, resource diversity, and geographic diversity. While it is hard to argue the renewable potential of Southern California, it seems presumptuous to believe that Southern California should bear a disproportionate share of the energy and transmission development when there is identified renewable energy potential in Northern California. This does not even address the electrical concerns of not having regional diversity in the California grid.